The 2003 Storm Water Construction General Permit

U.S. EPA – Region 6

Public Meetings September 2003

Purpose of This Public Meeting

- **Help you understand how to apply for and comply with the July 1, 2003, general permit for storm water associated with construction activities – The CGP**

What Will We Cover?

- ✓Why are we concerned about storm water?
- ✓Who must apply for the CGP?
- ✓When do you apply?
- ✓How do you apply?
- ✓What does the CGP require?
- ✓When can you terminate your coverage?

Terms to Know

- **NPDES** - National Pollutant Discharge Elimination System
- **CGP** – Construction General Permit
- **MS4** – Municipal Separate Storm Sewer System
- **SWP3 or SWPPP** – Storm Water Pollution Prevention Plan
- **BMP** – Best Management Practice
- **NOI** – Notice of Intent
- **NOT** – Notice of Termination
- **ESA** – Endangered Species Act
- **NHPA** – National Historic Preservation Act
- **SHPO/THPO** – State or Tribal Historic Preservation Officer

Why Are We Concerned About Storm Water?

The NPDES Storm Water Program

Source: NCDENR/COG Storm Water Pollution Prevention Storm Water Pollution Prevention Practices for Practices for Construction

Source: NCTCOG Storm Water Pollution Prevention Storm Water Pollution Prevention Practices for Practices for Construction

What Do States Identify as the Leading Causes and Sources Affecting Impaired Waters?

- **Leading Causes:** Siltation, nutrients, bacteria, metals (primarily mercury), and oxygen depleting substances

- **Leading Sources:** Pollution from urban and agricultural land that is transported by precipitation and runoff

Sources of Impairment

- According to 2000 305b report, of the 32% of the nation's waters that were assessed, **40% were impaired and urban runoff was a major cause of impairment for:**

  - **Rivers & Streams:** 11%
  - **Lakes & Ponds:** 18%
  - **Estuarine:** 32%
  - **Shoreline:** >50%

Why are we concerned about runoff from construction sites?

- Construction sites can produce 1,000 times more sediment during runoff than from forested land.
- Sediment runoff can destroy fish habitat and increase flooding
- Fish gills are not equipped to pass silt from construction sites

How does the CGP address the problem?

- Basic Goal of the Permit:
  - Prevent or minimize discharge of sediment, debris, construction materials, etc. during construction
- Major types of practices you can follow:
  - ***Erosion Control*** – prevents soil from being dislodged
  - ***Sediment Control*** – captures soil after its dislodged but before it leaves the site
  - ***Good Housekeeping*** – properly store materials, prevent wastewater discharges (e.g., concrete washout, etc.), contain litter, etc.

Who Must Apply?

Who is responsible?

- The Construction Operator must comply with the permit. An operator is:
  - Someone who has control over & ability to modify site plans or specifications and/or
  - Someone with day-to-day operational control at the site
- An operator can be a developer, owner, general contractor, or builder (generally not a subcontractor).

Which Construction Activities are Regulated?

- Construction sites disturbing 1 or more acres

- Construction sites disturbing less than one acre that are part of a larger "Common Plan of Development or Sale" that will in total disturbs 1 or more acres

Large = 5+ acres Small = 1-5 acres

Waivers for Small Construction Activities

- Rainfall erosivity factor less than 5 ("low rainfall erosivity")
- Storm water controls are not needed based on a TMDL or equivalent assessment addressing pollutants of concern
- **Online calculator: http://ei.tamu.edu/index.html**

How Do You Apply for the CGP?

Step 1: Read the Construction General Permit and Fact Sheet

- These are available from EPA at: www.epa.gov/region6/sws or
- Call Terry Branch at 214-665-6667

- You are responsible for knowing what's required in the permit before submitting the NOI.
- Keep a copy of the permit with your paperwork.

Step 2: Make sure you are eligible to apply for the permit.

- Is your project discharging to an impaired water? Is there an applicable TMDL?
  - NM: Rich Powell NMED 505-827-2798

www.nmenv.state.nm.us/swqb/Monitoring+Assessment/index.html

  - OK: Steve Webb ODEQ 405-702-8194
  - EPA: www.epa.gov/owow/tmdl/

- Will your project impact an endangered species or critical habitat?
  - ESA Review Procedures described in Appendix C of CGP
  - Four step procedure in Appendix C

Step 3: Develop and Implement a Storm Water Pollution Prevention Plan

- A SWPPP is more than just an erosion and sediment control plan. A SWPPP must also include:
  - ✓Good housekeeping practices
  - ✓Maintenance considerations
  - ✓Inspection frequencies/procedures
  - ✓Signature/certification
  - ✓Address availability of Plan

Step 3: Develop and Implement a Storm Water Pollution Prevention Plan

- Check Part 9 for additional requirements for NM, OK, and six NM Pueblos
- Map showing location, waterbodies, grading, drainage, and BMPs
- Perimeter erosion controls (e.g., silt fence)
- Good Housekeeping practices (no discharge of excess cement slurry, dust control, appropriate equipment, material and waste storage)

Step 3: Develop and Implement a Storm Water Pollution Prevention Plan

Implement the Plan

- Implement the controls
- Inspect and maintain the controls
- Update/change plan as necessary
- Keep SWPPP onsite
- Post a sign or notice

Step 4: Complete and submit a Notice of Intent (NOI).

- ✓The NOI is not an 'application.' You will not receive the permit from EPA later in the mail.
- ✓By signing and submitting the NOI, you are agreeing to comply with all requirements in the construction general permit.

How to Complete the Construction NOI

- Asks for basic project information
  - Permit number for your project area
  - Location, including lat/long
  - Estimated start/completion date
  - Estimated area to be disturbed
- SWPPP location (generally must be onsite)
- Waters the project discharges to
- Endangered Species Information
- Certification (Signature required)

When Do You Apply?

When do you need to send in the NOI?

- *Before Sept. 29, 2003*, your NOI must be postmarked at least 7 calendar days before construction starts.
- *After Sept. 29, 2003*, you must submit your NOI and wait at least 7 calendar days after your NOI is posted on EPA's website before construction can start.

* Projects covered under the'98 CGP must submit a new NOI and update their SWPPP by Sept. 29!

I've got permit coverage, what now?

- Post your site sign (copy of NOI, location of SWP3, contact information)
- Implement the SWP3 you developed
- Conduct and document your inspections – addressing any maintenance or SWP3 revisions as necessary
- Option to inspect every other week plus after 0.5" rain OR simply once per week – document your choice in your SWP3 (N/A in NM)

When Can You Terminate Coverage?

When can I terminate my permit?

- Earth disturbing activities finished and site has been finally stabilized
- Someone else has replaced you as the "operator"
- For residential construction, once site is temporarily stabilized and occupied by the homeowner (e.g, wants to put in their own lawn).

What are my "final stabilization" options?

- 70% of background vegetative cover
- Non-vegetative stabilization (riprap, gabions, etc.) – impervious cover used simply for stabilization should be avoided
- Semi-permanent low or no maintenance erosion control practices combined with seed for long-term stabilization (e.g., properly secured seed impregnated erosion control mats, etc.) (N/A in NM)
- On agricultural land, return to pre-construction agricultural use (e.g., row crops, etc.)

What's New?

What's new for this CGP?

- Covers 1-5 acre small construction
- ISTEA municipalities and Tribes need permit
- 7 day delay between NOI and coverage
- Electronic online NOIs available soon
- New Mexico: CWA 401 certification conditions on both State and Indian Country lands
- Oklahoma: coverage added for Dept. of Agriculture dischargers & CWA 401certification conditions on State lands

What's new for this CGP? (cont.)

- NOI information:
  - Indian reservation/Tribal affiliation if on Indian Country Lands
- Uncontaminated excavation dewatering added to allowable non-stormwater list
- Clarified eligibility for discharges threatening water quality – document consistency with TMDLs
- Address of SWP3 now required instead of optional
- Partial final stabilization acceptable – except in NM

What's new for this CGP? (cont.)

- Runoff coefficient estimates eliminated
- Option for inspecting weekly vs. bi-weekly plus after 0.5" storm – except NM and Pueblo of Isleta
- Clarified inspection requirements for linear projects
- Procedure for addressing non-attainment of water quality standards
- Standard conditions updated
- Designation of signatory authority can be kept with SWP3 vs. submitted to EPA

What's new for this CGP? (cont.)

- Updated "FAQ" in Part IX of Fact Sheet
  - Construction vs. "operational" earth disturbance
  - Who at a project needs the permit
  - What is "no discharge"
  - Common plan acreage for infill construction
  - Future construction on parcels
  - Contingent "common plans"
  - Non-contiguous "common plans"
  - Options for final stabilization and areas that are supposed to remain unvegetated

Construction BMPs

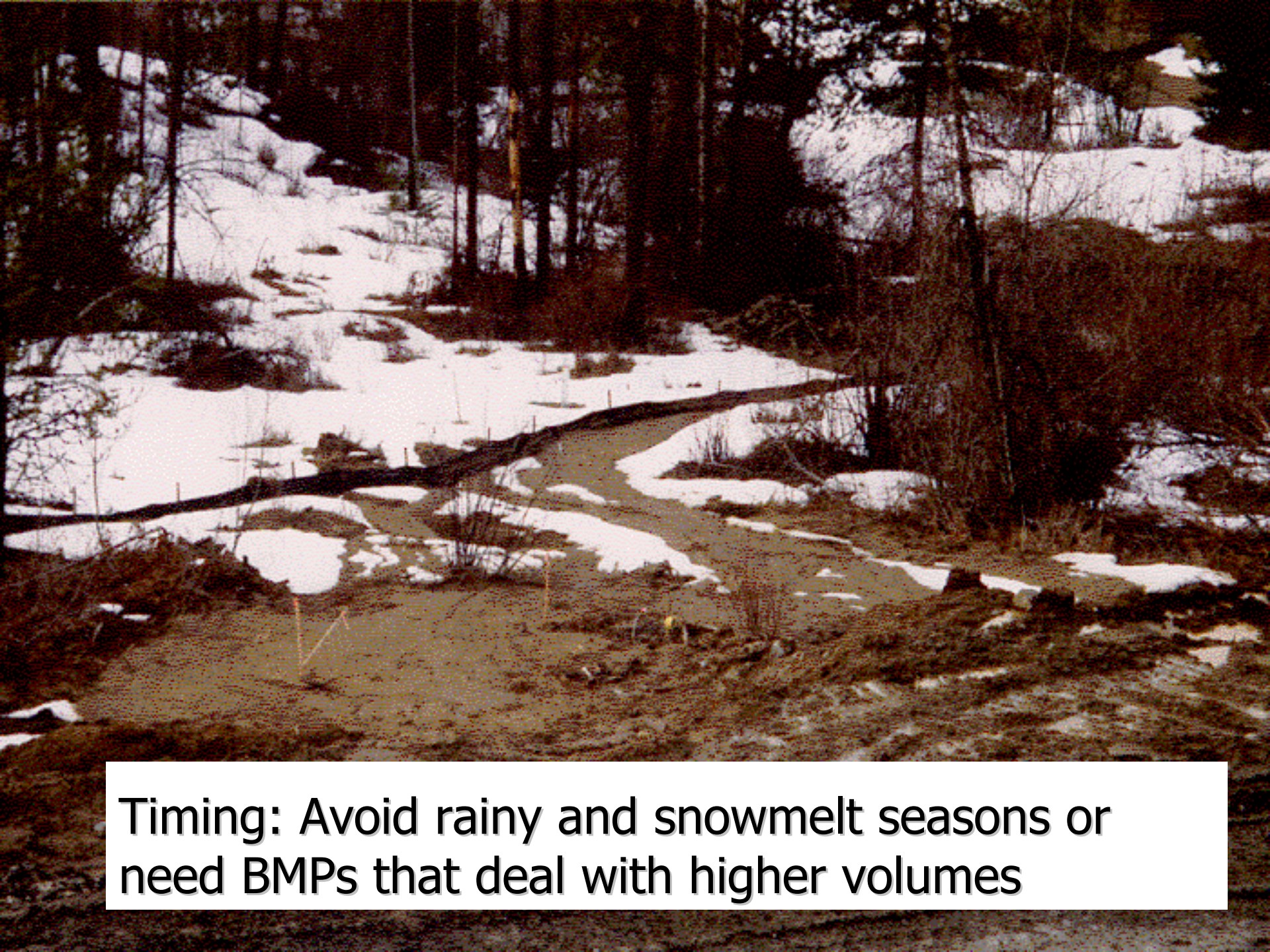
What BMPs must be in a SWP3?

- LOTS of flexibility
- Must include:
  - Site and activity description
  - Controls to reduce pollutants during construction
  - Stabilization of disturbed areas
  - Description of post-construction controls
  - Controls for dedicated support activities (e.g., batch plant)

Don’t just put silt fence around the perimeter of your project. You’re wasting money!


A well constructed Sediment Fence


Correct use of erosion and sediment controls means that sediment does not enter the stormwater system.



Timing: Avoid rainy and snowmelt seasons or need BMPs that deal with higher volumes

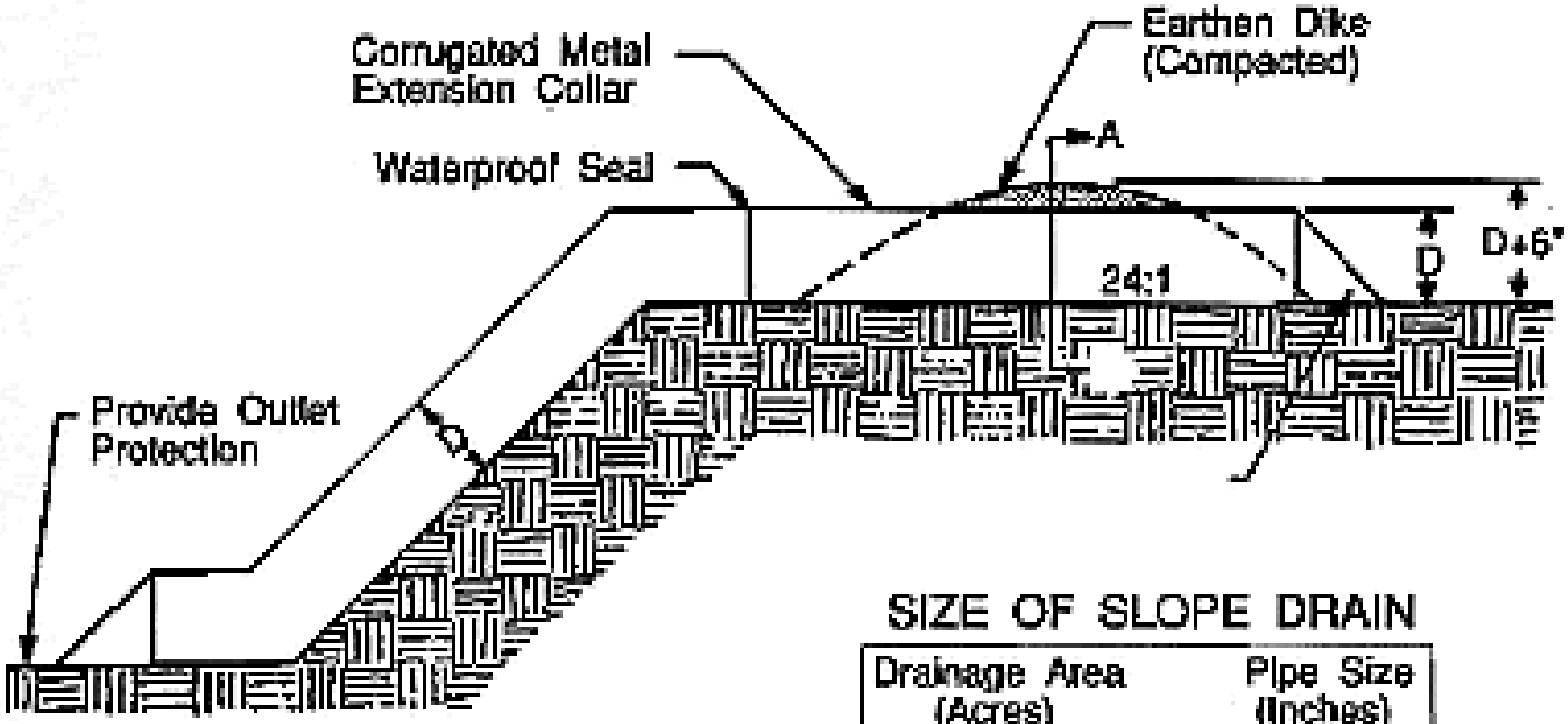
Exposed soils can be temporarily stabilized by driving a tractor over the surface

Grass mulching is applied to stabilize exposed soils and to reduce storm water runoff velocity

Stabilized construction entrances allow dirt to be removed from tire treads and collected as trucks leave construction sites

Coarse gravel and cinder blocks are often used to keep sediment and other pollutants out of storm drains


A well constructed sediment trap
constructed around an inlet pit.



SIZE OF SLOPE DRAIN

Drainage Area (Acres)	Pipe Size (Inches)
<1.5	12"
<5.0	18"
<10.0	24"

Drains can be installed along a steep exposed slope to divert runoff and prevent erosion (Source: Urban Drainage and Flood Control District, 1999)


Check dams reduces water velocity.

Sediment basins are used to trap sediments and temporarily detain runoff on larger construction sites

Sediment traps are used to collect sediment-laden runoff from disturbed areas on construction sites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Building waste should be stored in designated area and in a manner that will prevent it moving off site by either wind or water.

A permanent retaining wall prevents slope failure


Spillages like this oil must be cleaned up immediately.

Absorbent snakes can be used to protect storm drains from spills (Spill911, no date)

Construction reviewers periodically inspect construction sites to ensure that contractors have installed and maintained their erosion and sediment controls properly (Source: University of Connecticut Cooperative Extension System, 2000)


Urgent repairs are needed to make this control effective again.
Sediment needs to be removed from both the road and the footpath.
More controls are also needed on the site to reduce the sediment flow.


This filter bag has been effective in stopping sediment entering the stormwater system but damage from vehicles and sediment buildup has rendered it ineffective.


The buildup of sediment behind this fence should be removed and additional posts put in place to properly support the fence.


The sediment fence does not wrap around the pile to adequately contain it.


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HOT TOPICS

- EPA BMP and SWP3 Guidance – On Web Now
- Construction and Development Effluent Limitation Guidelines – Proposed 2002, Final 2004
- Policy Letter on Oil & Gas Construction – 8/3/01
- 9th Circuit rules on Phase II – 1/14/03
- CGP has been challenged

Online Resources

- EPA Office of Water - **www.epa.gov/npdes**
- EPA Region 6 – **www.epa.gov/region6/sws/**
- Construction and Development Effluent Limitation Guidelines - **www.epa.gov/ost/guide/**